



43962-010700a.ST25
SEQUENCE LISTING

<110> Geerts, Hugo
Masure, Stefan
Cik, Miroslav
Meert, Theo
Ver Donck, Luc

<120> NEUROTROPHIC GROWTH FACTOR

<130> 43962-010700

<140> 09/357,349

<141> 1999-07-14

<150> 09/327,668

<151> 1999-06-08

<150> 09/248,772

<151> 1999-02-12

<150> GB 9815283.8

<151> 1998-07-14

<160> 49

<170> PatentIn version 3.2

<210> 1

<211> 339

<212> DNA

<213> Homo sapiens

<400> 1

gctggggggcc cgggcagccg cgctcgggca gcgggggagc ggggctgccg cctgcgctcg	60
cagctggtgc cggcgcgcgc gctcggcctg ggccaccgct ccgacgagct ggtgcgtttc	120
cgcttctgca gcggctcctg ccgccgcgcg cgctctccac acgacctcag cctggccagc	180
ctactgggag ccggggccct gcgaccgcc ccgggctccc ggcccgtag ccagccctgc	240
tgccgacca cgcgtacga agcgggtctc tcatggagc tcaacagcac ctggagaacc	300
gtggaccgcc tctccgccac cgctgcggc tgcctgggc	339

<210> 2

<211> 474

<212> DNA

<213> Homo sapiens

<400> 2

cgccgccgca gccttctcgg ccgcgcccc cgccgcctgc accccatct gctcttcccc	60
gcggggggcc cgcggcgcgc gctggggggc cgggcagccg cgctcgggca gcgggggagc	120
ggggctgccg cctgcgctcg cagctggtgc cggcgcgcgc gctcggcctg ggccaccgct	180
ccgacgagct ggtgcgtttc cgcttctgca gcggctcctg ccgccgcgcg cgctctccac	240
acgacctcag cctggccagc ctactgggag ccggggccct gcgaccgcc ccgggctccc	300

43962-010700a.ST25

```

ggccccgtcag ccagccctgc tgccgaccca cgcgctacga agcgggtctcc ttcattggacg      360
tcaacagcac ctggagaacc gtggaccgcc tctccgccac cgcttgcggc tgcctgggct      420
gagggtctgc tccagggctt tgcagactgg acccttaccg gtggctcttc ctgc      474

```

```

<210> 3
<211> 113
<212> PRT
<213> Homo sapiens

```

```
<400> 3
```

```

Ala Gly Gly Pro Gly Ser Arg Ala Arg Ala Ala Gly Ala Arg Gly Cys
1          5          10          15

```

```

Arg Leu Arg Ser Gln Leu Val Pro Val Arg Ala Leu Gly Leu Gly His
          20          25          30

```

```

Arg Ser Asp Glu Leu Val Arg Phe Arg Phe Cys Ser Gly Ser Cys Arg
          35          40          45

```

```

Arg Ala Arg Ser Pro His Asp Leu Ser Leu Ala Ser Leu Leu Gly Ala
          50          55          60

```

```

Gly Ala Leu Arg Pro Pro Pro Gly Ser Arg Pro Val Ser Gln Pro Cys
65          70          75          80

```

```

Cys Arg Pro Thr Arg Tyr Glu Ala Val Ser Phe Met Asp Val Asn Ser
          85          90          95

```

```

Thr Trp Arg Thr Val Asp Arg Leu Ser Ala Thr Ala Cys Gly Cys Leu
          100          105          110

```

Gly

```

<210> 4
<211> 139
<212> PRT
<213> Homo sapiens

```

```
<400> 4
```

```

Pro Pro Gln Pro Ser Arg Pro Ala Pro Pro Pro Ala Pro Ser
1          5          10          15

```

```

Ala Leu Pro Arg Gly Gly Arg Ala Ala Arg Ala Gly Gly Pro Gly Ser
          20          25          30

```

```

Arg Ala Arg Ala Ala Gly Ala Arg Gly Cys Arg Leu Arg Ser Gln Leu
          35          40          45

```

43962-010700a.ST25

Val Pro Val Arg Ala Leu Gly Leu Gly His Arg Ser Asp Glu Leu Val
50 55 60

Arg Phe Arg Phe Cys Ser Gly Ser Cys Arg Arg Ala Arg Ser Pro His
65 70 75 80

Asp Leu Ser Leu Ala Ser Leu Leu Gly Ala Gly Ala Leu Arg Pro Pro
85 90 95

Pro Gly Ser Arg Pro Val Ser Gln Pro Cys Cys Arg Pro Thr Arg Tyr
100 105 110

Glu Ala Val Ser Phe Met Asp Val Asn Ser Thr Trp Arg Thr Val Asp
115 120 125

Arg Leu Ser Ala Thr Ala Cys Gly Cys Leu Gly
130 135

<210> 5
<211> 819
<212> DNA
<213> Homo sapiens

<400> 5
gagtttcccc tccacacagc taggagccca tgcccggcct gatctcagcc cgaggacagc 60
ccctccttga ggtccttcct ccccaagccc acctgggtgc cctctttctc cctgaggctc 120
cacttggtct ctccgcgcag cctgccctgt ggcccaccct ggccgctctg gctctgctga 180
gcagcgtcgc agaggcctcc ctgggctccg cgccccgcag ccctgcccc cgcgaaggcc 240
ccccgcctgt cctggcgctcc cccgccggcc acctgccggg taggtgagag ggcgaggggg 300
cggggagggg ctggcccggg acaccgcgcg tgactgggtc tcattccagg gggacgcacg 360
gcccgcctgt gcagtggaag agcccggcgg ccgccgccgc agccttctcg gcccgcgccc 420
ccgccgcctg caccctcatc tgctcttccc cgcgggggcc gcgcggcgcg ggctgggggc 480
ccgggcagcc gcgctcgggc agcgggggcg cggggctgcc gcctgcgctc gcagctggtg 540
ccggtgcgcg cgctcggcct gggccaccgc tccgacgagc tgggtgcgttt ccgcttctgc 600
agcggctcct gccgccgcg gcgctctcca cagcactca gcctggccag cctactgggc 660
gccggggccc tgcgaccgcc cccgggctcc cgggccgtca gccagccctg ctgccgaccc 720
acgcgctacg aagcgggtctc cttcatggac gtcaacagca cctggagaac cgtggaccgc 780
ctctccgccca ccgcctgcgg ctgcctgggc tgagggctc 819

<210> 6
<211> 85

43962-010700a.ST25

<212> PRT
<213> Homo sapiens

<400> 6

Met Pro Gly Leu Ile Ser Ala Arg Gly Gln Pro Leu Leu Glu Val Leu
1 5 10 15

Pro Pro Gln Ala His Leu Gly Ala Leu Phe Leu Pro Glu Ala Pro Leu
20 25 30

Gly Leu Ser Ala Gln Pro Ala Leu Trp Pro Thr Leu Ala Ala Leu Ala
35 40 45

Leu Leu Ser Ser Val Ala Glu Ala Ser Leu Gly Ser Ala Pro Arg Ser
50 55 60

Pro Ala Pro Arg Glu Gly Pro Pro Pro Val Leu Ala Ser Pro Ala Gly
65 70 75 80

His Leu Pro Gly Arg
85

<210> 7
<211> 159
<212> PRT
<213> Homo sapiens

<400> 7

Leu Gly Leu Ile Pro Gly Gly Arg Thr Ala Arg Trp Cys Ser Gly Arg
1 5 10 15

Ala Arg Arg Pro Pro Pro Gln Pro Ser Arg Pro Ala Pro Pro Pro Pro
20 25 30

Ala Pro Pro Ser Ala Leu Pro Arg Gly Gly Arg Ala Ala Arg Ala Gly
35 40 45

Gly Pro Gly Ser Arg Ala Arg Ala Ala Gly Ala Arg Gly Cys Arg Leu
50 55 60

Arg Ser Gln Leu Val Pro Val Arg Ala Leu Gly Leu Gly His Arg Ser
65 70 75 80

Asp Glu Leu Val Arg Phe Arg Phe Cys Ser Gly Ser Cys Arg Arg Ala
85 90 95

Arg Ser Pro His Asp Leu Ser Leu Ala Ser Leu Leu Gly Ala Gly Ala
100 105 110

43962-010700a.ST25

Leu Arg Pro Pro Pro Gly Ser Arg Pro Val Ser Gln Pro Cys Cys Arg
115 120 125

Pro Thr Arg Tyr Glu Ala Val Ser Phe Met Asp Val Asn Ser Thr Trp
130 135 140

Arg Thr Val Asp Arg Leu Ser Ala Thr Ala Cys Gly Cys Leu Gly
145 150 155

<210> 8
<211> 1188
<212> DNA
<213> Homo sapiens

<400> 8
ctgatgggcg ctccctggtgt tgatagagat ggaacttgga cttggaggcc tctccacgct 60
gtcccactgc ccctggccta ggcggcaggt gagtggttct cccagtgact cctacctggt 120
actgaggaaa ggcggcttga ctggtgaggg agagcagggc ttggcttggg cagcggttag 180
gtgtgggagg gaaaatggc agggaggagc caggtgaatg ggaggaggag cgggacttct 240
ctgaatggc ggtgcactca ggtgattcct cccctgggct cccagaggca gcaaaccat 300
tatactggaa cctaggccct tcctgagttt cccctccaca cagctaggag cccatgccc 360
gcctgatctc agcccagga cagccctcc ttgaggtcct tcctcccaa gccacctgg 420
gtgccctctt tctccctgag gctccacttg gtctctccgc gcagcctgcc ctgtggccca 480
ccctggccgc tctggctctg ctgagcagcg tcgcagaggc ctccctgggc tccgcgcccc 540
gcagccctgc cccccgcgaa gggccccgc ctgtcctggc gtccccgcc ggccacctgc 600
cgggtaggtg agagggcgag ggggcggggc ggggtggcc cgggacaccg cgcgtgactg 660
ggctctattc cagggggacg cacggcccg tggtgcagtg gaagagccc ggcggccg 720
ccgcagcctt ctgccccgc gccccgcg cctgcacccc catctgctct tccccgcggg 780
ggccgcgagg cgcgggctgg gggccccggc agccgcgctc gggcagcggg ggcgcggggc 840
tgccgcctgc gctcgcagct ggtgccggtg cgcgcgctcg gcctgggcca ccgctccgac 900
gagctggtgc gtttccgctt ctgcagcggc tcctgccgcc gcgcgcgctc tccacacgac 960
ctcagcctgg ccagcctact gggcgccggg gccctgcgac cggccccggg ctccccggcc 1020
gtcagccagc cctgctgccg acccacgcgc tacgaagcgg tctccttcat ggacgtcaac 1080
agcacctgga gaaccgtgga ccgcctctcc gccaccgcct gcggctgcct gggctgaggg 1140
ctcgcctccag ggctttgcag actggaccct taccgggtggc tcttcctg 1188

<210> 9
<211> 228
<212> PRT

<213> Homo sapiens

<400> 9

Met Glu Leu Gly Leu Gly Gly Leu Ser Thr Leu Ser His Cys Pro Trp
 1 5 10 15

Pro Arg Arg Gln Ala Pro Leu Gly Leu Ser Ala Gln Pro Ala Leu Trp
 20 25 30

Pro Thr Leu Ala Ala Leu Ala Leu Leu Ser Ser Val Ala Glu Ala Ser
 35 40 45

Leu Gly Ser Ala Pro Arg Ser Pro Ala Pro Arg Glu Gly Pro Pro Pro
 50 55 60

Val Leu Ala Ser Pro Ala Gly His Leu Pro Gly Gly Arg Thr Ala Arg
 65 70 75 80

Trp Cys Ser Gly Arg Ala Arg Arg Pro Pro Pro Gln Pro Ser Arg Pro
 85 90 95

Ala Pro Pro Pro Pro Ala Pro Pro Ser Ala Leu Pro Arg Gly Gly Arg
 100 105 110

Ala Ala Arg Ala Gly Gly Pro Gly Ser Arg Ala Arg Ala Ala Gly Ala
 115 120 125

Arg Gly Cys Arg Leu Arg Ser Gln Leu Val Pro Val Arg Ala Leu Gly
 130 135 140

Leu Gly His Arg Ser Asp Glu Leu Val Arg Phe Arg Phe Cys Ser Gly
 145 150 155 160

Ser Cys Arg Arg Ala Arg Ser Pro His Asp Leu Ser Leu Ala Ser Leu
 165 170 175

Leu Gly Ala Gly Ala Leu Arg Pro Pro Pro Gly Ser Arg Pro Val Ser
 180 185 190

Gln Pro Cys Cys Arg Pro Thr Arg Tyr Glu Ala Val Ser Phe Met Asp
 195 200 205

Val Asn Ser Thr Trp Arg Thr Val Asp Arg Leu Ser Ala Thr Ala Cys
 210 215 220

Gly Cys Leu Gly
 225

43962-010700a.ST25

<210> 10
<211> 220
<212> PRT
<213> Homo sapiens

<400> 10

Met Glu Leu Gly Leu Gly Gly Leu Ser Thr Leu Ser His Cys Pro Trp
1 5 10 15

Pro Arg Arg Gln Pro Ala Leu Trp Pro Thr Leu Ala Ala Leu Ala Leu
20 25 30

Leu Ser Ser Val Ala Glu Ala Ser Leu Gly Ser Ala Pro Arg Ser Pro
35 40 45

Ala Pro Arg Glu Gly Pro Pro Pro Val Leu Ala Ser Pro Ala Gly His
50 55 60

Leu Pro Gly Gly Arg Thr Ala Arg Trp Cys Ser Gly Arg Ala Arg Arg
65 70 75 80

Pro Pro Pro Gln Pro Ser Arg Pro Ala Pro Pro Pro Pro Ala Pro Pro
85 90 95

Ser Ala Leu Pro Arg Gly Gly Arg Ala Ala Arg Ala Gly Gly Pro Gly
100 105 110

Ser Arg Ala Arg Ala Ala Gly Ala Arg Gly Cys Arg Leu Arg Ser Gln
115 120 125

Leu Val Pro Val Arg Ala Leu Gly Leu Gly His Arg Ser Asp Glu Leu
130 135 140

Val Arg Phe Arg Phe Cys Ser Gly Ser Cys Arg Arg Ala Arg Ser Pro
145 150 155 160

His Asp Leu Ser Leu Ala Ser Leu Leu Gly Ala Gly Ala Leu Arg Pro
165 170 175

Pro Pro Gly Ser Arg Pro Val Ser Gln Pro Cys Cys Arg Pro Thr Arg
180 185 190

Tyr Glu Ala Val Ser Phe Met Asp Val Asn Ser Thr Trp Arg Thr Val
195 200 205

Asp Arg Leu Ser Ala Thr Ala Cys Gly Cys Leu Gly
210 215 220

43962-010700a.ST25

<210> 11
 <211> 766
 <212> DNA
 <213> Homo sapiens

<400> 11
 ctgatgggcg ctcctggtgt tgatagagat ggaacttgga cttggaggcc tctccacgct 60
 gtccccactgc ccctggccta ggcggcaggc tccacttggt ctctccgcgc agcctgcccct 120
 gtggcccacc ctggccgctc tggctctgct gagcagcgtc gcagaggcct ccctgggctc 180
 cgcgccccgc agccctgccc cccgcgaagg ccccccgcct gtcctggcgt ccccgcccg 240
 ccacctgccg gggggacgca cggcccgtg gtgcagtgga agagcccggc ggccgcccgc 300
 gcagccttct cggcccgcgc ccccgccgc tgcaccccca tctgctcttc cccgcggggg 360
 ccgcgcggcg cgggctgggg gcccgggcag ccgcgctcgg gcagcggggg cgcggggctg 420
 ccgcctgcgc tcgcagctgg tgccggtgcg cgcgctcggc ctggggcacc gctccgacga 480
 gctggtgcgt ttccgcttct gcagcggctc ctgccgccgc gcgcgctctc cacacgacct 540
 cagcctggcc agcctactgg gcgcggggc cctgcgaccg ccccggggt cccggcccgt 600
 cagccagccc tgctgccgac ccacgcgcta cgaagcggtc tccttcatgg acgtcaacag 660
 cacctggaga accgtggacc gcctctccgc caccgcctgc ggctgcctgg gctgagggt 720
 cgctccaggg ctttgagac tggaccctta ccggtggctc ttcctg 766

<210> 12
 <211> 742
 <212> DNA
 <213> Homo sapiens

<400> 12
 ctgatgggcg ctcctggtgt tgatagagat ggaacttgga cttggaggcc tctccacgct 60
 gtccccactgc ccctggccta ggcggcagcc tgccctgtgg cccaccctgg ccgctctggc 120
 tctgctgagc agcgtcgcag aggcctccct gggctccgcg ccccgagcc ctgcccccg 180
 cgaaggcccc ccgcctgtcc tggcgtcccc cgccggccac ctgccggggg gacgcacggc 240
 ccgctggtgc agtggagag cccggcggcc gccgcgcgag ccttctcggc ccgcgcccc 300
 gccgcctgca ccccatctg ctcttccccg cgggggccgc gcggcgcggg ctgggggccc 360
 gggcagccgc gtcggggcag cgggggcgcg gggctgccgc ctgcgctcgc agctggtgcc 420
 ggtgcgcgcg ctggcctgg gccaccgctc cgacgagctg gtgcgtttcc gcttctgcag 480
 cggctcctgc cgccgcgcgc gctctccaca cgacctcagc ctggccagcc tactgggcgc 540
 cggggccctg cgaccgcccc cgggctcccc gcccgtcagc cagccctgct gccgaccac 600
 gcgctacgaa gcggtctcct tcatggacgt caacagcacc tggagaaccg tggaccgcct 660
 ctccgccacc gcctgcggct gcctgggctg agggctcgct ccagggttt gcagactgga 720

cccttaccgg tggctcttcc tg

742

<210> 13
 <211> 603
 <212> DNA
 <213> Homo sapiens

<400> 13
 ctgatgggCG ctcctggtgt tgatagagat ggaacttggA cttggaggcc tctccacgct 60
 gtcccactgc ccctggccta ggcggcaggg ggacgcacgg cccgctggtg cagtggaaga 120
 gcccggcggc cgccgccgca gccttctcgg cccgcgcccc cgccgcctgc acccccatct 180
 gctcttcccc gcggggggccg cgcggcgcgg gctggggggcc cgggcagccg cgctcgggca 240
 gcggggggcg ggggctgccg cctgcgctcg cagctggtgc cggcgcgcgc gctcggcctg 300
 ggccaccgct ccgacgagct ggtgcgtttc cgcttctgca gcggctcctg ccgccgcgcg 360
 cgctctccac acgacctcag cctggccagc ctactgggCG ccggggccct gcgaccgccc 420
 ccgggctccc ggcccgtcag ccagccctgc tgccgaccca cgcgctacga agcgggtctcc 480
 ttcatggacg tcaacagcac ctggagaacc gtggaccgcc tctccgccac cgctcgcggc 540
 tgcctgggct gagggctcgc tccagggtct tgcagactgg acccttaccg gtggctcttc 600
 ctg 603

<210> 14
 <211> 489
 <212> DNA
 <213> Homo sapiens

<400> 14
 ctgatgggCG ctcctggtgt tgatagagat ggaacttggA cttggaggcc tctccacgct 60
 gtcccactgc ccctggccta ggcggcagcc tgccctgtgg cccaccctgg ccgctctggc 120
 tctgctgagc agcgtcgcag aggcctccct gggctccgCG ccccgagcc ctgcccccg 180
 cgaaggcccc ccgctgtcc tggcgctccc cgccggccac ctgccggcgg ctcttgccgc 240
 cgcgcgcgct ctccacacga cctcagcctg gccagcctac tgggcgccgg ggccctgcga 300
 ccgcccccg gctcccggcc cgtcagccag ccctgctgcc gaccacgcg ctacgaagcg 360
 gtctccttca tggacgtcaa cagcacctgg agaaccgtgg accgcctctc cgccaccgcc 420
 tgcggctgcc tgggctgagg gctcgtcca gggctttgca gactggaccc ttaccggtgg 480
 ctcttcctg 489

<210> 15
 <211> 350
 <212> DNA
 <213> Homo sapiens

43962-010700a.ST25

<400> 15
 ctgatgggcg ctcctggtgt tgatagagat ggaacttgga cttggaggcc tctccacgct 60
 gtcccaactgc ccctggccta ggcggcagcg gctcctgccg ccgcgcgcgc tctccacacg 120
 acctcagcct ggccagccta ctgggcgccg gggccctgcg accgcccccg ggctcccggc 180
 ccgtcagcca gccctgctgc cgaccacgc gctacgaagc ggtctccttc atggacgtca 240
 acagcacctg gagaaccgtg gaccgcctct ccgccaccgc ctgcggctgc ctgggctgag 300
 ggctcgctcc agggctttgc agactggacc cttaccgggtg gctcttcctg 350

<210> 16
 <211> 74
 <212> PRT
 <213> Homo sapiens

<400> 16

Ser Pro Asp Lys Gln Met Ala Val Leu Pro Arg Arg Glu Arg Asn Arg
 1 5 10 15

Gln Ala Ala Ala Ala Asn Pro Glu Asn Ser Arg Gly Lys Gly Arg Arg
 20 25 30

Gly Gln Arg Gly Lys Asn Arg Gly Cys Val Leu Thr Ala Ile His Leu
 35 40 45

Asn Val Thr Asp Leu Gly Leu Gly Tyr Glu Thr Lys Glu Glu Leu Ile
 50 55 60

Phe Arg Tyr Cys Ser Gly Ser Cys Asp Ala
 65 70

<210> 17
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 17

Ala Glu Thr Thr Tyr Asp Lys Ile Leu Lys Asn Leu Ser Arg Asn Arg
 1 5 10 15

Arg Leu Val Ser
 20

<210> 18
 <211> 40
 <212> PRT
 <213> Homo sapiens

<400> 18

43962-010700a.ST25

Asp Lys Val Gly Gln Ala Cys Cys Arg Pro Ile Ala Phe Asp Asp Asp
1 5 10 15

Leu Ser Phe Leu Asp Asp Asn Leu Val Tyr His Ile Leu Arg Lys His
20 25 30

Ser Ala Lys Arg Cys Gly Cys Ile
35 40

<210> 19
<211> 41
<212> PRT
<213> Homo sapiens

<400> 19

Ala Arg Leu Gly Ala Arg Pro Cys Gly Leu Arg Glu Leu Glu Val Arg
1 5 10 15

Val Ser Glu Leu Gly Leu Gly Tyr Ala Ser Asp Glu Thr Val Leu Phe
20 25 30

Arg Tyr Cys Ala Gly Ala Cys Glu Ala
35 40

<210> 20
<211> 20
<212> PRT
<213> Homo sapiens

<400> 20

Ala Ala Arg Val Tyr Asp Leu Gly Leu Arg Arg Leu Arg Gln Arg Arg
1 5 10 15

Arg Leu Arg Arg
20

<210> 21
<211> 41
<212> PRT
<213> Homo sapiens

<400> 21

Glu Arg Val Arg Ala Gln Pro Cys Cys Arg Pro Thr Ala Tyr Glu Asp
1 5 10 15

Glu Val Ser Phe Leu Asp Ala His Ser Arg Tyr His Thr Val His Glu
20 25 30

Leu Ser Ala Arg Glu Cys Ala Cys Val
35 40

<210> 22
 <211> 56
 <212> PRT
 <213> Homo sapiens

<400> 22

Ala Leu Ser Gly Pro Cys Gln Leu Trp Ser Leu Thr Leu Ser Val Ala
 1 5 10 15

Glu Leu Gly Leu Gly Tyr Ala Ser Glu Glu Lys Val Ile Phe Arg Tyr
 20 25 30

Cys Ala Gly Ser Cys Pro Arg Gly Ala Arg Thr Gln His Gly Leu Ala
 35 40 45

Leu Ala Arg Leu Gln Gly Gln Gly
 50 55

<210> 23
 <211> 14
 <212> PRT
 <213> Homo sapiens

<400> 23

Arg Ala His Gly Gly Pro Cys Cys Arg Pro Thr Arg Tyr Thr
 1 5 10

<210> 24
 <211> 26
 <212> PRT
 <213> Homo sapiens

<400> 24

Asp Val Ala Phe Leu Asp Asp Arg His Arg Trp Gln Arg Leu Pro Gln
 1 5 10 15

Leu Ser Ala Ala Ala Cys Gly Cys Gly Gly
 20 25

<210> 25
 <211> 49
 <212> PRT
 <213> Homo sapiens

<400> 25

Ala Gly Gly Pro Gly Ser Arg Ala Arg Ala Ala Gly Ala Arg Gly Cys
 1 5 10 15

Arg Leu Arg Ser Gln Leu Val Pro Val Arg Ala Leu Gly Leu Gly His
 Page 12

20 43962-010700a.ST25 30
25

Arg Ser Asp Glu Leu Val Arg Phe Arg Phe Cys Ser Gly Ser Cys Arg
35 40 45

Arg

<210> 26
<211> 38
<212> PRT
<213> Homo sapeins

<400> 26

Ala Arg Ser Pro His Asp Leu Ser Leu Ala Ser Leu Leu Gly Ala Gly
1 5 10 15

Ala Leu Arg Pro Pro Pro Gly Ser Arg Pro Val Ser Gln Pro Cys Cys
20 25 30

Arg Pro Thr Arg Tyr Glu
35

<210> 27
<211> 26
<212> PRT
<213> Homo sapiens

<400> 27

Ala Val Ser Phe Met Asp Val Asn Ser Thr Trp Arg Thr Val Asp Arg
1 5 10 15

Leu Ser Ala Thr Ala Cys Gly Cys Leu Gly
20 25

<210> 28
<211> 20
<212> PRT
<213> Homo sapiens

<400> 28

Met Glu Leu Gly Leu Gly Gly Leu Ser Thr Leu Ser His Cys Pro Trp
1 5 10 15

Pro Arg Arg Gln
20

<210> 29
<211> 54
<212> PRT

43962-010700a.ST25

<213> Homo sapiens

<400> 29

Ala Pro Leu Gly Leu Ser Ala Gln Pro Ala Leu Trp Pro Thr Leu Ala
1 5 10 15

Ala Leu Ala Leu Leu Ser Ser Val Ala Glu Ala Ser Leu Gly Ser Ala
20 25 30

Pro Arg Ser Pro Ala Pro Arg Glu Gly Pro Pro Pro Val Leu Ala Ser
35 40 45

Pro Ala Gly His Leu Pro
50

<210> 30

<211> 154

<212> PRT

<213> Homo sapiens

<400> 30

Gly Gly Arg Thr Ala Arg Trp Cys Ser Gly Arg Ala Arg Arg Pro Pro
1 5 10 15

Pro Gln Pro Ser Arg Pro Ala Pro Pro Pro Pro Ala Pro Pro Ser Ala
20 25 30

Leu Pro Arg Gly Gly Arg Ala Ala Arg Ala Gly Gly Pro Gly Ser Arg
35 40 45

Ala Arg Ala Ala Gly Ala Arg Gly Cys Arg Leu Arg Ser Gln Leu Val
50 55 60

Pro Val Arg Ala Leu Gly Leu Gly His Arg Ser Asp Glu Leu Val Arg
65 70 75 80

Phe Arg Phe Cys Ser Gly Ser Cys Arg Arg Ala Arg Ser Pro His Asp
85 90 95

Leu Ser Leu Ala Ser Leu Leu Gly Ala Gly Ala Leu Arg Pro Pro Pro
100 105 110

Gly Ser Arg Pro Val Ser Gln Pro Cys Cys Arg Pro Thr Arg Tyr Glu
115 120 125

Ala Val Ser Phe Met Asp Val Asn Ser Thr Trp Arg Thr Val Asp Arg
130 135 140

43962-010700a.ST25
 Leu Ser Ala Thr Ala Cys Gly Cys Leu Gly
 145 150

<210> 31
 <211> 23
 <212> DNA
 <213> Artificial

<220>
 <223> Primer PNHsp1

<400> 31
 cggtgcactc aggtgattcc tcc 23

<210> 32
 <211> 26
 <212> DNA
 <213> Artificial

<220>
 <223> Primer PNHsp2

<400> 32
 ggcagcaaac ccattatact ggaacc 26

<210> 33
 <211> 21
 <212> DNA
 <213> Artificial

<220>
 <223> Primer PNHsp3

<400> 33
 cgctggtgca gtggaagagc c 21

<210> 34
 <211> 22
 <212> DNA
 <213> Artificial

<220>
 <223> Primer PHNsp4

<400> 34
 ctgcaccccc atctgctctt cc 22

<210> 35
 <211> 22
 <212> DNA
 <213> Artificial

<220>
 <223> Primer PNHap1

<400> 35
 gcaggaagag ccaccggtaa gg 22

<210> 36
 <211> 22
 <212> DNA
 <213> Artificial

<220>
 <223> Primer PNHap2

<400> 36
 ccagtctgca aagccctgga gc

22

<210> 37
 <211> 22
 <212> DNA
 <213> Artificial

<220>
 <223> Primer PNHsp5

<400> 37
 gcaagctgcc tcaacaggag gg

22

<210> 38
 <211> 24
 <212> DNA
 <213> Artificial

<220>
 <223> Nested Primer PNHsp6

<400> 38
 ggtgggggaa cagctcaaca atgg

24

<210> 39
 <211> 25
 <212> DNA
 <213> Artificial

<220>
 <223> Forward Primer PNHexp-sp1

<400> 39
 gcggatccgg ctggggggccc gggca

25

<210> 40
 <211> 28
 <212> DNA
 <213> Artificial

<220>
 <223> Reverse Primer PNHexp-ap1

<400> 40
 gcctcgagtc agcccaggca gccgcagg

28

<210> 41
 <211> 39

<212> PRT
 <213> Artificial

<220>
 <223> Plasmid NH2-terminal

<400> 41

Met Arg Gly Ser His His His His His His Gly Met Ala Ser Met Thr
 1 5 10 15

Gly Gly Gln Gln Met Gly Arg Asp Leu Tyr Asp Asp Asp Asp Lys Asp
 20 25 30

Pro Ala Gly Gly Pro Gly Ser
 35

<210> 42
 <211> 26
 <212> DNA
 <213> Artificial

<220>
 <223> Primer EVN(7)-sp1

<400> 42
 ttcgcgtgtc tacaaactca actccc

26

<210> 43
 <211> 22
 <212> DNA
 <213> Artificial

<220>
 <223> Primer PNhap1

<400> 43
 gcaggaagag ccaccggtaa gg

22

<210> 44
 <211> 19
 <212> DNA
 <213> Artificial

<220>
 <223> Primer 1

<400> 44
 acggttctcc aggtgctgt

19

<210> 45
 <211> 15
 <212> DNA
 <213> Artificial

<220>
 <223> Primer 3

<400> 45 tgctgccgac ccacg	15
<210> 46 <211> 26 <212> DNA <213> Artificial	
<220> <223> TaqMan Probe 5	
<400> 46 ctacgaagcg gtctccttca tggacg	26
<210> 47 <211> 22 <212> DNA <213> Artificial	
<220> <223> Primer 2	
<400> 47 cagagttaaa agcagccctg gt	22
<210> 48 <211> 22 <212> DNA <213> Artificial	
<220> <223> Primer 4	
<400> 48 gaaggtgaag gtcggagtca ac	22
<210> 49 <211> 21 <212> DNA <213> Artificial	
<220> <223> TaqMan Probe 6	
<400> 49 tttgggtccgt attgggagcc t	21